



DO NOT TYPE IN THIS BOX

Bulletin #: 3
Academic Year: 2022-23

FLORIDA INTERNATIONAL UNIVERSITY UNDERGRADUATE PROGRAM PROPOSAL

Changes to an Undergraduate Degree Program

INSTRUCTIONS: Please Type. Fill out this form **completely**.

School/College Engineering and Computing

Div./Dept. Knight Foundation School of Computing and Information Sciences

Degree Title: Bachelor of Science in Information Technology

B.A. B.S. Other Bachelor's _____

Proposed Implementation Date: 8/21/2023

PROPOSAL REQUESTED BY:

Faculty Contact Masoud Sadjadi Masoud Sadjadi 11 / 10 / 2022

(Type Name) (Signature)

sadjadi@cs.fiu.edu ☺

(Email address) (Phone Number)

Chair (Dept./Div.) Jason Liu [Signature] 11 / 21 / 2022

(Type Name) (Signature)

Chair (Curr. Comm.) _____ / / 2022

(Type Name) (Signature)

College/School Dean John Volakis _____ / / 2022

(Type Name) (Signature)

NO HEARING REQUIRED. PLEASE SUBMIT ORIGINAL FORM.



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(Type Name) (Signature)
_____ sadjadi@cs.fiu.edu _____
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Bulletin #: _____

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CHANGES TO UNDERGRADUATE DEGREE PROGRAM

PLEASE SUBMIT THIS FORM WITH YOUR PROPOSAL

Please fill out the coversheet in its entirety.

The proposal must include the following elements using the current undergraduate catalog:

- I. List old degree's prescribed courses, other requirements, credits, and page number (left column)
- II. List new degree's prescribed courses, other requirements, and credits (**right column, use red font to denote additions to text and strikethrough feature to denote omissions**)
- III. Include a brief rationale for the change

Complete the checklist that begins on the following page.

- | | YES | NO | N/A |
|---|----------------------------------|----------------------------------|----------------------------------|
| 1. Do all courses exist in the current catalog? | <input checked="" type="radio"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. If courses are not in the current catalog, are they proposed in the same Curriculum Committee bulletin as this proposal? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="radio"/> |
| 3. If courses are not in the current catalog or proposed in this same bulletin, were they approved in a previous curriculum bulletin?
<ul style="list-style-type: none"> • If yes, attach a separate sheet indicating each course number, name, bulletin number, and bulletin date. • If the answers to 1, 2, or 3 are no, do not submit the proposal. Address the course issues first. | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="radio"/> |
| 4. Do courses listed have the correct course prefixes, official titles, course numbers, and number of credits? | <input checked="" type="radio"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Do course descriptions match the existing catalog or proposed course descriptions? | <input checked="" type="radio"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Are all courses to be added taught in the same proposing department? | <input checked="" type="radio"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Are courses to be deleted taught in the same proposing department?
<ul style="list-style-type: none"> • If the answer to 6 or 7 is no, do you have written approval/acknowledgment of the other department(s)? The written approval(s) or acknowledgment(s) must be attached to the proposal. (You must have written approval before submitting this document.) | <input checked="" type="radio"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. Does this change affect the courses measuring Student Learning Outcomes (SLOs) or Program Outcomes (POs) for the program? (For a copy of the assessment reports, please send a request to assessment@fiu.edu .) If yes, please submit revised SLOs and POs to assessment@fiu.edu for approval. Documentation of approval must be attached. | <input type="checkbox"/> | <input checked="" type="radio"/> | <input type="checkbox"/> |

YES NO N/A

9. Have you contacted the Office of Academic Planning and Accountability to determine if the proposed program changes constitute a substantive change that requires notification or a prospectus to be submitted to the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC)? Please do so prior to submitting this form if you answer yes to any of the questions below.

- Will significant additional equipment be needed to deliver the revised program?

- Will significant additional facilities be needed to deliver the revised program?

- Will significant additional financial resources be needed to deliver the revised program?

- Will a significant amount of new content be required? (Significant is defined as equal to or greater than 25% new content.)

- o Changing 25% or more of the content of an existing degree constitutes a "significant departure" from the institution's existing programs and requires SACSCOC notification (or approval) prior to implementation. Whether to notify or to seek approval from SACSCOC depends on the amount of new content required. How much new content will be required for the revised program? (Please check the appropriate percent range below.)

25%-49% of the program's content, which requires notification to SACSCOC prior to implementation

50% or more of the program's content, which requires SACSCOC approval prior to implementation; approval must be obtained according to SACSCOC deadlines

- Will a significant number of new faculty members be required to deliver the revised program?

- Will significant additional library/learning resources be needed to deliver the revised program?

- Will at least 25% of the program be offered at a new location geographically apart from the main campus? (If yes, please check the appropriate percent range below.)

YES NO N/A

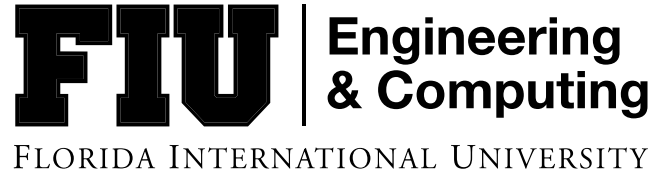
25%-49% of the program will be offered at a new location, which requires notification to SACSCOC prior to implementation

50% or more of the program will be offered at a new location, which requires SACSCOC approval prior to implementation; approval must be obtained according to SACSCOC deadlines

- Will the revised program enter into a collaborative academic arrangement that includes the initiation of a dual academic program with another institution?

- Will the revised program enter into a contract by which an entity not eligible for Title IV funding offers 25% or more of the program (e.g., international university)?

Clear Form



To: Mary Cossio
Faculty Senate

From: Dean or Assoc. Dean and College Curriculum Cmte. Chair

Subject: Memo in Lieu of Curriculum Chair and Dean Signatures for Bulletin #3

Date: November 24, 2022

As instructed by the Faculty Senate, this memo will serve as approval of the attached proposals for Bulletin #3 by our Curriculum Committee Chair, Alexander Afanasyev, and the Dean for College of Engineering and Computing (John L. Volakis), in lieu of physical signatures. The proposals in this Bulletin were approved by our Curriculum Committee on November 23, 2022.

In addition to the above, memos in lieu of signatures have also been included by departments unable to obtain physical signatures for their faculty contact and/or department chair.



To: Mary Cossio
Faculty Senate

From: Faculty Contact and KFSCIS Interim Director

Subject: Memo in Lieu of Curriculum Chair and Dean Signatures for Bulletin #3

Date: November 24, 2022

As instructed by the Faculty Senate, this memo will serve as approval of the attached proposals from KFSCIS for Bulletin #3 by faculty contact (Masoud Sadjadi) and KFSCIS Interim Director (Jason Liu), in lieu of physical signatures. The proposals in this Bulletin were approved by our Curriculum Committee on November 23, 2022.

Bachelor of Science in Information Technology

Justification for Program Changes

For Capstone I and Capstone II, students work on faculty supervised projects in teams of up to 5 members to design and implement solutions to problems utilizing knowledge obtained across the spectrum of Information Technology courses. The one-credit course “Capstone I” allows students to understand the technologies needed for their capstone project and plan a strategy for their chosen project. The prerequisite “COP3804 (Intermediate Programming II) and Junior standing” will ensure students have completed the basic required courses to begin their capstone project. The two-credit course CIS 4951 “Capstone II” with prerequisite “CIS 3950 (Capstone I) and Senior standing” will ensure students have completed the first part of the capstone (called Capstone I) and most of the required courses. The faculty approved the addition of CIS-3950 (Capstone I) and CIS-4951 (Capstone II) as required courses to the B.S. in Information Technology program (Motion 8) on 9/2/22 and plan for this to be effective starting in Fall 2023. Students who are admitted before Fall 2023 are also strongly encouraged to take Capstone I and II, but to accommodate them, they are allowed to follow the catalog for when they joined the program.

Due to the addition of Capstone I (1 credit) and Capstone II (2 credits) as required courses, the number of free electives goes down from nine to six.

We consolidated the courses from five concentrations into two broader elective groups to provide our students with more flexibility in choosing their elective courses. This way students do not have to wait for the offering of a specific elective course to graduate.

For keeping our BS in IT up to date with the rapid changes in this field, the list of elective courses for this major needs to be revised frequently as we encourage our faculty to offer new courses relevant to topics practiced in the industry. By allowing KFSCIS to maintain the list of electives on its portal, our students and faculty members can become aware of the most recent changes in a timely manner, keeping up with the pace of changes in this field. Having the list as part of the catalog would only create unnecessary work for everyone involved and delays the effective date of the changes significantly. This proposal resolves the above issue.

FLORIDA INTERNATIONAL UNIVERSITY UNDERGRADUATE PROGRAM/CATALOG CHANGE PROPOSAL

FIU Undergraduate Catalog

OLD (page 450)	NEW																																																																																
<p>Bachelor of Science in Information Technology</p> <p>The Knight Foundation School of Computing and Information Sciences offers a Bachelor of Science degree in Information Technology. There are two majors in the program. 1) Information Technology (IT) Major: The information technology major is for students who want broad coverage of information technology concepts. 2) Software Major: The software major is for students who want to add a strong theoretical foundation of Computer Science that can be integrated within a vast array of career options.</p> <p>The B.S. in Information Technology degree as a first major requires completion of prerequisite courses and required and elective courses as outlined below. All required courses must be completed with a grade of "C" or better. All students must participate in KFSCIS assessment activities and successfully complete an exit interview prior to graduation.</p> <p>Degree Program Hours: 120</p> <p>Lower Division</p> <p>Students must complete the following courses as part of their course work, preferably during the first 60 credits.</p> <p>Common Prerequisite Courses and Equivalencies</p> <table style="width: 100%; border: none;"> <thead> <tr> <th style="text-align: left;"><u>FIU Course(s)</u></th> <th style="text-align: left;"><u>Equivalent Course(s)</u></th> </tr> </thead> <tbody> <tr> <td>CGS 2060 or CGS 2100 or CGS 2518</td> <td>CGSXXXX</td> </tr> <tr> <td>COP 2250</td> <td>COPXXXX</td> </tr> <tr> <td>PSY 2012</td> <td>PSYXXXX</td> </tr> <tr> <td>MAC 1140 or MAC 1147</td> <td>MACXXXX</td> </tr> </tbody> </table> <p><i>Consult FIU Catalog for double majors coupled with IT Programs. Students would need to take the prerequisites for the other major they select, in addition to the IT prerequisites.</i></p> <p>Courses which form part of the statewide articulation between the State University System and the Florida College System will fulfill the Lower Division Common Prerequisites.</p> <p>Please visit https://cpm.flvc.org for a current list of state-approved common prerequisites.</p> <p>Required Courses</p> <p>Common Prerequisites for Both Majors</p> <p>All students must have completed the following courses (or equivalent) prior to starting the Information Technology program.</p> <table style="width: 100%; border: none;"> <tbody> <tr> <td>CGS 1920</td> <td>Introduction to the Field of Computing</td> <td style="text-align: right;">1</td> </tr> <tr> <td>or</td> <td></td> <td></td> </tr> <tr> <td>COP 1000</td> <td>Computer Science for Everyone</td> <td style="text-align: right;">3</td> </tr> <tr> <td>or</td> <td></td> <td></td> </tr> <tr> <td>IDC 1000</td> <td>Intro to Computer Programming</td> <td style="text-align: right;">3</td> </tr> <tr> <td>CGS 2060</td> <td>Introduction to Microcomputers</td> <td style="text-align: right;">3</td> </tr> <tr> <td>or</td> <td></td> <td></td> </tr> <tr> <td>CGS 2100</td> <td>Introduction to Microcomputer Applications for Business</td> <td style="text-align: right;">3</td> </tr> <tr> <td>or</td> <td></td> <td></td> </tr> <tr> <td>CGS 2518</td> <td>Computer Data Analysis</td> <td style="text-align: right;">3</td> </tr> </tbody> </table>	<u>FIU Course(s)</u>	<u>Equivalent Course(s)</u>	CGS 2060 or CGS 2100 or CGS 2518	CGSXXXX	COP 2250	COPXXXX	PSY 2012	PSYXXXX	MAC 1140 or MAC 1147	MACXXXX	CGS 1920	Introduction to the Field of Computing	1	or			COP 1000	Computer Science for Everyone	3	or			IDC 1000	Intro to Computer Programming	3	CGS 2060	Introduction to Microcomputers	3	or			CGS 2100	Introduction to Microcomputer Applications for Business	3	or			CGS 2518	Computer Data Analysis	3	<p>Bachelor of Science in Information Technology</p> <p>The Knight Foundation School of Computing and Information Sciences offers a Bachelor of Science degree in Information Technology. 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MAC 1140	Pre-Calculus Algebra	3	MAC 1140	Pre-Calculus Algebra	3
or			or		
MAC 1147	Pre-Calculus Algebra and Trigonometry	3	MAC 1147	Pre-Calculus Algebra and Trigonometry	3
PSY 2012	Introductory Psychology or equivalent	3	PSY 2012	Introductory Psychology or equivalent	3
IT Major-specific Prerequisites			IT Major-specific Prerequisites		
COP 2250	Programming in Java	3	COP 2250	Programming in Java	3
COT 3100	Discrete Structures	3	COT 3100	Discrete Structures	3
or			or		
MAD 1100	Mathematics Concepts for Information Technology	3	MAD 1100	Mathematics Concepts for Information Technology	3
Software Major-specific Prerequisites			Software Major-specific Prerequisites		
COP 2210	Computer Programming I	3	COP 2210	Computer Programming I	3
COT 3100	Discrete Structures	3	COT 3100	Discrete Structures	3
or			or		
MAD 2104	Discrete Mathematics	3	MAD 2104	Discrete Mathematics	3
Upper Division Requirements			Upper Division Requirements		
At least 50% of the upper division credits required for the BS in Information Technology must be taken at FIU.			At least 50% of the upper division credits required for the BS in Information Technology must be taken at FIU.		
Interdisciplinary Courses for Both Majors			Interdisciplinary Courses for Both Majors		
Nine additional credits must be taken outside the Knight Foundation School of Computing and Information Sciences. These credits must normally be selected from the courses for a minor or certificate in another discipline. When there is no minor or certificate in the area of the student's interest, a set of courses can be created with the approval of advisers from KFSCIS and the other area of interest.			Nine additional credits must be taken outside the Knight Foundation School of Computing and Information Sciences. These credits must normally be selected from the courses for a minor or certificate in another discipline. When there is no minor or certificate in the area of the student's interest, a set of courses can be created with the approval of advisers from KFSCIS and the other area of interest.		
Common Required Courses for Both Majors			Common Required Courses for Both Majors		
All students must complete the following courses.			All students must complete the following courses.		
CEN 3721	Introduction to Human-Computer Interaction	3	CEN 3721	Introduction to Human-Computer Interaction	3
CGS 3095	Technology in the Global Arena – GL	3	CGS 3095	Technology in the Global Arena – GL	3
CGS 3767	Computer Operating Systems	3	CGS 3767	Computer Operating Systems	3
CGS 4285	Applied Computer Networking	3	CGS 4285	Applied Computer Networking	3
CGS 4854	Web Site Construction and Management	3	CGS 4854	Web Site Construction and Management	3
CNT 4403	Computing and Network Security	3	CNT 4403	Computing and Network Security	3
COP 4703	Information Storage and Retrieval	3	COP 4703	Information Storage and Retrieval	3
COP 4814	Component-Based Software Development	3	COP 4814	Component-Based Software Development	3
ENC 3249	Professional and Technical Writing for Computing	3	ENC 3249	Professional and Technical Writing for Computing	3
or			or		
ENC 3213	Professional and Technical Writing	3	ENC 3213	Professional and Technical Writing	3
			<u>CIS 3950</u>	<u>Capstone I</u>	<u>1</u>
			<u>CIS 4951</u>	<u>Capstone II</u>	<u>2</u>
Information Technology Electives			Information Technology Electives		
Students in both majors must take information technology electives. The electives are arranged in the following areas of concentration:			Students in both majors must take information technology electives. The electives are arranged in the following areas of concentration: <u>KFSCIS maintains two lists of courses for two elective groups: Application Development and System Network*</u>		
●	System Administration		●	System Administration	
●	Applied Network Administration		●	Applied Network Administration	
●	Application Development		●	Application Development	
●	Databases		●	Databases	
●	Security		●	Security	
			<u>*https://www.cis.fiu.edu/academics/degrees/undergraduate/information-technology/</u>		

